January 19, 2011

Scott Williams
President, Chief Executive Officer, and Director
Alternative Energy and Environmental Solutions, Inc.
159 North State Street
Newtown, PA 18940

Re: Alternative Energy and Environmental Solutions, Inc. Amendment No. 1 to Registration Statement on Form S-1 Filed December 28, 2010 File No. 333-170118

Dear Mr. Williams:

We have reviewed your amended registration statement and letter dated December 28, 2010 and we have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by further amending your registration statement or providing the requested information, as applicable. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the next amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Risk Factors

"We may not be able to acquire the biotechnology we have selected...," page 4

- 1. We note your response to our prior comment 2. Please disclose here and in your Business discussion:
 - What Wytex Ventures is and the nature of its business;
 - What other business relationships or other affiliations you have with Wytex;
 - The nature of the technology that AEES wishes to obtain from Wytex;
 - Whether Wytex owns or licenses the technology and any related intellectual property rights. If Wytex owns the technology, whether it developed the

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technology itself or acquired it from a third party. If Wytex licenses the technology, from whom and on what terms;

- Whether Wytex and AEES have signed a term sheet, memorandum of understanding or any other document that memorializes the parties' intent to enter into a licensing agreement with regard to the technology;
- When the parties contemplate that AEES will acquire the license from Wytex;
 and
- The availability of comparable technology elsewhere should the parties be unable to reach an agreement.

"The biotechnology that we intend to acquire may not work...," page 4

2. We note your response to our prior comment 3. Please disclose where the technology has been tested and by whom, whether these test results have been peer reviewed, published and are publicly available, and if so, advise us where they may be obtained. Please also clarify in the risk factor, if true, that no one has yet successfully applied this technology in commercial applications.

"Environmental impact may adversely affect our ability to implement this technology in the Power River Basin Area," page 4

- 3. Please clarify how water quality and other environmental factors could be adversely impacted by the use of this technology.
- 4. You state in this risk factor that "testing to-date has shown no adverse effects on the environment or water quality." Please delete this phrase, as it could be construed as attempting to mitigate the material risk you are describing. Please also provide at least one specific example of how one or more conservation groups have objected to the use of such biotechnology.

Description of Business, page 16

5. We note your response to prior comment 11. Please revise your disclosure to clarify who performed the "in-house extrapolations," the scientific and industry background of the person(s) performing the calculations and whether these calculations are comparable to calculations made by independent third parties. Please also replace the phrase "in-house extrapolations" with the phrase "calculations made by []." In addition, please revise your statement that the market potential for your technology is \$10 billion over the next 10 years to clarify that this is your own estimate.

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6. Please discuss how likely or reasonable it is that each well will generate 50 mcf per day and that you will be able to tap 20,000 of the existing 22,000 wells. If you have no independent means of substantiating these estimates, then you should state this explicitly in your disclosure.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 18

- 7. You state in this disclosure that the U.S. Geological Survey is the source of your statement that the Powder River Basin has the potential to produce 22 Tcf of natural gas in the next 20 years. As noted in our prior comments 10 and 11, statements such as these that are attributed to the U.S. Geological Survey should be supplemented either with copies of such information from the U.S. Geological Survey itself or from a third-party independent source that substantiates it. Please provide us with this material.
- 8. With respect to the information that you attribute to the Wyoming Oil and Gas Conversation, please also provide us with copies of this information or with a third-party independent source that substantiates it.

Item 16. Exhibits and Financial Statement Schedules, page II-4

- 9. In the disclosure of this consulting agreement in the registration statement, please specify what particular services Wytex is providing to AEES.
- 10. We note your response to our prior comment 13 and the filing of Exhibit 10.3. Please be advised that the agreement you have filed does not bear conforming signatures of either party. Please confirm that this exhibit reflects the final, execution copy of the agreement.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

• should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;

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- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Scot Foley at (202) 551-3383, Daniel Greenspan at (202) 551-3623 or me at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey Riedler Assistant Director

cc: Gregg E. Jaclin, Esq.
Anslow & Jaclin, LLP
195 Route 9 South, Suite 204
Manalapan, NJ 07726